## Claims:

1. A compound having the structure of Formula I, or an isomeric, prodrug, tautomeric, pharmaceutically acceptable salt, N-oxide, and/or stereoisomeric form thereof:

5

wherein

R<sub>8</sub> represents a substituted or unsubstituted heterocycle,

F represents (CH<sub>2</sub>)<sub>n</sub>, where n is an integer between 1 and 6; and

Q represents a substituted or unsubstituted secondary amino substituent, substituted or unsubstituted tertiary amino substitutent, or substituted or unsubstituted nitrogen-containing heterocycle;

provided that the following compounds are excluded:

15

10

20

2. The compound of claim 1, wherein n is 1.

A82.

10

3. The compound of claim 1 or 2, wherein  $R_8$  represents a morpholino or piperazine ring.

4. The compound of any of claims 1-3, wherein Q represents substituted or
 unsubstituted pyrrolidine, substituted or unsubstituted piperazine, or substituted or unsubstituted piperidine.

5. The compound of claim 1, wherein the compound is selected from the following:

B2	OH OH
В3	CN N CH CH
В4	CH O OH
B5	CH CH
B6	CIH N N N OH

В7	CIH CH CH
В8	CIH N N N OH
В9	CIH CH <sub>1</sub>
B10	CH CH
B11	CH OH

B12	CH N N N N N N N N N N N N N N N N N N N
B13	CH N CIH N
B14	CIH CIH
B15	CIH CIH
B16	CIH CIH CH

B17	CH <sub>3</sub> CH <sub>3</sub> CH <sub>3</sub>
B18	HO HO CIH
B19	ON NO CHE
B20	CIH CH-OH
C2	

6. The compound of any of claims 1–4, wherein Q represents a substituted secondary amino substituent, substituted tertiary amino substituent, or substituted nitrogen-containing heterocycle.

7. The compound of claim 6, wherein one or more substituents, independently for each occurrence, are selected from alkyl, oxo, acyl amino, hydroxyl, carbonyl, sulfonyl, ester, amide, NR'', hydroxy alkyl, alkoxy alkyl, aryl, heterocyclyl, cycloalkyl, and oligo(ethylene glycol).

5 8. The compound of any of claims 1-4, wherein  $R_8$  has the structure:

where Z represents O or NR", and

R'' represents H or lower alkyl.

9. A compound, or isomeric, prodrug, tautomeric, pharmaceutically acceptable salt, N-oxide, or stereoisomeric form thereof, having the structure:

15

20

10. A compound, or isomeric, prodrug, tautomeric, pharmaceutically acceptable salt, N-oxide, or stereoisomeric form thereof, having the structure:

11. A purified or synthetic compound, or isomeric, prodrug, tautomeric, pharmaceutically acceptable salt, N-oxide, or stereoisomeric form thereof, having the structure:

- 5 12. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound of any of claims 1 -11.
  - 13. A method of treating a hyperproliferative disorder, comprising administering to an animal a compound of any of claims 1-11.
- 14. A method of inhibiting proliferation of a cell, comprising contacting the cell with a compound of any of claims 1-11.
  - 15. A method of treating a viral infection, comprising administering to a mammal a compound of any of claims 1-11.
  - 16. The method of claim 15, wherein the viral infection is caused by a human immunodeficiency virus (HIV).
- 15 17. A method for the treatment or prevention of alopecia induced by chemotherapy or radiation therapy, comprising administering to a mammal a compound of any of claims 1-11 conjointly with one or more chemotherapeutics or radiation therapy.

18. A method of treating a hyperproliferative disorder, comprising administering to an animal a compound of claim 11.

- 19. A method of inhibiting proliferation of a cell, comprising contacting the cell with a compound of claim 11.
- 5 20. A method of treating a viral infection, comprising administering to a mammal a compound of claim 11 or a composition containing a therapeutically effective amount of such compound.
  - 21. The method of claim 20, wherein the viral infection is caused by a human immunodeficiency virus (HIV).
- 10 22. The use of a compound of any of claims 1-11 for the manufacture of a medicament.
- The use of claim 22, wherein the medicament is a pharmaceutical for the treatment or prevention of a disorder selected from a hyperprolifiative disorder, a
   viral infection, chemotherapy-induced alopecia, and a disease associated with cyclin-dependent kinase activity.
  - 24. A compound of any of claims 1-11, for use in the treatment of a disorder.
- 20 25. The compound of claim 24, wherein the disorder is selected from a hyperprolifiative disorder, a viral infection, chemotherapy-induced alopecia, and a disease associated with cyclin-dependent kinase activity
- 26. A method of inhibiting cyclin-dependent kinase comprising administering to a host in need of such treatment a therapeutically effective amount of a compound of
   25 any of claims 1-11 or a composition containing a therapeutically effective amount of such compound.

27. A method of treating cyclin-dependent kinase associated disorders comprising administering to a host in need of such treatment a therapeutically effective amount of a compound of any of claims 1-11 or a composition containing a therapeutically effective amount of such compound.